AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

1. (Currently Amended) A method of producing a transformed plant having improved rooting efficiency and/or prolonged vase life relative to a plant that is not transformed, the method comprising:

(a) transforming a plant ~~using a gene wherein~~ with a heterologous DNA encoding a protein that binds to a stress-responsive element ~~contained in a stress-responsive promoter and regulates the transcription of a gene located downstream of the element is ligated downstream of the~~ under the control of a stress-responsive promoter; and

(b) expressing the DNA in the transformed plant,

wherein:

(i) the stress-responsive promoter is selected from the group consisting of rd29A gene promoter, rd29B gene promoter, rd17 gene promoter, rd22 gene promoter, DREB1A gene promoter, cor6.6 gene promoter, cor15a gene promoter, erd1 gene promoter, and kin1 gene promoter; and

(ii) the DNA is selected from the group consisting of DREB1A, DREB1B, DREB1C, DREB1D, DREB1E, DREB1F, DREB2A, DREB2B, DREB2C, DREB2D, DREB2E, DREB2F, DREB2G, and DREB2H.

2.-3. (Cancelled)

4. (Currently Amended) The method of producing a transformed plant of claim 1, wherein the DNA ~~encoding a protein that binds to a stress-responsive element and regulates the transcription of a gene located downstream of the element~~ is ~~at least one DNA~~ selected from the group consisting of:

(a) a DNA ~~comprising a~~ consisting of the nucleotide sequence that is selected from the group consisting of SEQ ID NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27 ~~derived from the nucleotide sequence of a DNA of at least one of DREB1A gene, DREB1B gene,~~

~~DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene by deletion, substitution, addition, or insertion of one or several nucleotides, and encoding a protein having activity to bind to a stress-responsive element so as to regulate the transcription of a gene located downstream of the element~~;

(b) a DNA comprising a nucleotide sequence ~~having~~ that is at least ~~80% or more homology~~ 94% homologous with the nucleotide sequence that is selected from the group consisting of SEQ ID NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27, wherein the protein encoded by homologous DNA is capable of binding ~~of a DNA of at least one of DREB1A gene, DREB1B gene, DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene, and encoding a protein having activity to bind~~ to a stress-responsive element and ~~regulate~~ regulating the transcription of a gene located downstream of the element; and

(c) a DNA ~~hybridizing under stringent conditions to a DNA complementary to a DNA of at least one of DREB1A gene, DREB1B gene, DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene, and~~ encoding a protein consisting of the amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 ~~having activity to bind to a stress-responsive element and regulate the transcription of a gene located downstream of the element~~.

5. (Cancelled)

6. (Currently Amended) A transformed plant having improved rooting efficiency and/or prolonged vase life relative to a plant that is not transformed, wherein the transformed plant is produced by the method according to claim 1~~, comprising a gene wherein a DNA encoding a protein that binds to a stress-responsive element contained in a stress-responsive promoter and regulates the transcription of a gene located downstream of the element is ligated~~

~~downstream of the stress-responsive promoter~~.

7. (Currently Amended) The transformed plant of claim 6 ~~produced by the method according to claim 2~~, wherein the stress-responsive promoter is ~~at least one promoter~~ selected from the group consisting of rd29A gene promoter, rd29B gene promoter, rd17 gene promoter, rd22 gene promoter, DREB1A gene promoter, cor6.6 gene promoter, cor15a gene promoter, erd1 gene promoter, and kin1 gene promoter.

8. (Currently Amended) The transformed plant of claim 6 ~~produced by the method according to claim 3~~, wherein the DNA ~~encoding a protein that binds to a stress-responsive element so as to regulate the transcription of a gene located downstream of the element~~ is ~~at least one gene~~ selected from the group consisting of DREB1A ~~gene~~, DREB1B ~~gene~~, DREB1C ~~gene~~, DREB1D ~~gene~~, DREB1E ~~gene~~, DREB1F ~~gene~~, DREB2A ~~gene~~, DREB2B ~~gene~~, DREB2C ~~gene~~, DREB2D ~~gene~~, DREB2E ~~gene~~, DREB2F ~~gene~~, DREB2G ~~gene~~, and DREB2H ~~gene~~.

9. (Currently Amended) The transformed plant of claim 6 ~~produced by the method according to claim 4~~, wherein the DNA ~~encoding a protein that binds to a stress-responsive element and regulates the transcription of a gene located downstream of the element~~ is ~~at least one DNA~~ selected from the group consisting of:

(a) a DNA ~~comprising a~~ consisting of the nucleotide sequence that is selected from the group consisting of SEQ ID NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27 ~~derived from the nucleotide sequence of a DNA of at least one of DREB1A gene, DREB1B gene, DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene by deletion, substitution, addition, or insertion of one or several nucleotides, and encoding a protein having activity to bind to a stress-responsive element so as to regulate the transcription of a gene located downstream of the element~~;

(b) a DNA comprising a nucleotide sequence ~~having~~ that is at least ~~80% or more homology~~ 94% homologous with the nucleotide sequence that is selected from the group

consisting of SEQ ID NOs: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25 and 27, wherein the protein encoded by homologous DNA is capable of binding ~~of a DNA of at least one of DREB1A gene, DREB1B gene, DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene, and encoding a protein having activity to bind~~ to a stress-responsive element and ~~regulate~~ regulating the transcription of a gene located downstream of the element; and

(c) a DNA ~~hybridizing under stringent conditions to a DNA complementary to a DNA of at least one of DREB1A gene, DREB1B gene, DREB1C gene, DREB1D gene, DREB1E gene, DREB1F gene, DREB2A gene, DREB2B gene, DREB2C gene, DREB2D gene, DREB2E gene, DREB2F gene, DREB2G gene, and DREB2H gene, and~~ encoding a protein consisting of the amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 ~~having activity to bind to a stress-responsive element and regulate the transcription of a gene located downstream of the element~~.

10. (Cancelled)

11. (New) A method for rooting a plant that is capable of adventitious propagation, comprising:

(i) providing a cutting from said plant that expresses a heterologous DNA encoding a protein that binds to a stress-responsive element, and then

(ii) exposing said cutting to conditions conductive to rooting,

whereby said cutting develops roots with an efficiency that is greater than a cutting from a non-transformed plant.

12. (New) A transformed ornamental plant, comprising a heterologous DNA encoding a protein that binds to a stress-responsive element under the control of a stress-responsive promoter, such that a cutting from said plant has a prolonged vase life relative to a cutting from a non-transformed plant.

13. (New) The ornamental plant of claim 1, wherein the ornamental plant is selected from the group consisting of lilies, orchids, chrysanthemums, roses, carnations, petunias, baby's breath, and cyclamens.

14. (New) The method of claim 1, wherein the DNA is transformed into the plant by using a vector selected from the group consisting of a virus, a Ti plasmid of Agrobacterium and an Ri plasmid of Agrobacterium.

15. (New) The method of claim 1, wherein the DNA is transformed into the plant by electroporation, polyethylene glycol-mediated transformation, particle gun transformation, microinjection, silicon nitride whisker-mediated transformation, or silicon carbide whisker-mediated transformation.